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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,947	01/16/2007	Gabor Fodor	4208-42	1524
23117 7590 12/24/2009 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER TRAN, MONG-THUY THI				
ART UNIT 2617		PAPER NUMBER		
MAIL DATE 12/24/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/583,947

**Applicant(s)**

FODOR ET AL.

**Examiner**

MONG-THUY TRAN

**Art Unit**

2617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 11, 13 - 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 11, 13 - 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS/US)
- Paper No(s)/Mail Date 10/26/2009

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This Office Action is in response to the Applicant's communication filed on 09/22/2009. In virtue of this communication, claim 12 is canceled, claims 1-11 and 13-17 are currently pending in the instant application.

***Response to Argument***

2. Applicant's arguments with respect to claims 1-11 and 13 -17 have been considered but are moot in view of the new ground(s) of rejection.

***Information Disclosure Statement***

3. The Information Disclosure Statement (IDS) Form PTO-1449, filed on 10/26/2009 is in compliance with the provision of 37 CFR 1.97. Accordingly, the information disclosed therein was considered by the examiner.

***Claim Objections***

4. Claim 8 is objected to because of the following informalities: a typographical error when Applicant amended claim 8. The word "further" in claim 8 should be crossed. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1 - 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chan et al. (hereafter Chan)** ("Mobility Management Incorporating Fuzzy Logic for a Heterogeneous IP Environment", IEEE Communication Magazine, December 2001), in view of **Dorenbosch et al. (hereafter Dorenbosch)** (Pub # US 2004/0028009 A1).

**Regarding claim 1**, Chan discloses a system allowing a user terminal in a network to simultaneously access a plurality of radio based access networks of diverse access technologies (see Fig. 1), the system comprising:

a plurality of access selection adapters (i.e., MT-SAT, MS-UMTS, MS-GPRS) each one being a network entity provided separate from the user terminal (i.e., TE), and each one associated with a respective radio access networks (i.e., satellite, UTRAN, BSS), and each one structured for receiving access dependent information from its respective access network (see the arrows in Fig. 1) and for mapping said radio access dependent information to access technology independent status information (i.e., FES, UMTS, GPRS core network); and

an access selector (i.e., service node) to interact with each access adapter for selection of an access network based on an individual QoS profile associated with each application and on said access technology independent status information (see Fig. 1, abstract, and introduction in page 42, 43).

Chan's system does not clearly disclose radio access networks being adapted for connection to a common backbone network and an access selector being a network

entity provided separate from the user terminal, and structured to interact with one or more applications resident in the user terminal and to interact with each access adapter for selection of an access network based on an individual QoS profile associated with each application and on said access technology independent status information.

Dorenbosch discloses a system for effecting a seamless handoff includes radio access networks being adapted for connection to a common backbone network (i.e., an internet 212 in Fig. 2) and an access selector (i.e., a gateway 205 in Fig. 2 acts as a service node) being a network entity provided separate from the user terminal, and structured to interact with one or more applications resident in the user terminal (see Fig. 2, Fig. 4 - Fig. 7 , and [0019]) and to interact with each access adapter for selection of an access network based on an individual QoS profile associated with each application and on said access technology independent status information (see [0012], [0013], and [0033] explain the results of the next processes in the seamless handoff for selection of an access network based on quality of service).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Chan's system in order to select an access network so that effecting a seamless handoff packet data communication from one IP connection to another, as suggested by Dorenbosch (see Dorenbosch in [0001], [0012], and [0013]).

**Regarding claim 2**, Chan discloses a system as modified in claim 1, wherein the access selection adapters are structured to use a protocol spanning the access networks (see reject claim 1).

**Regarding claim 3**, Chan discloses a system as modified in claim 1, wherein the radio access dependent information is provided by an access manager (i.e., terminal interworking unit (T-IWU) in Fig. 1) in the respective access selection adapter and is signaled between the respective access selection adapter and its corresponding access network on a spanning layer protocol (see Fig. 1 and introduction in pages 42, 43).

**Regarding claims 4 and 5**, Chan discloses a system as modified in claim 3, wherein the radio access dependent information comprises any of the following attributes: signal strength, signal quality, delay, service precedence, reliability, mean throughput and peak throughput, bit error ratio, control load parameters, media description parameters, packet format information, expected delay bound, packet loss ratio, 'bit error rate (BER), packet handling priority, packet loss ratio (PLR), and combinations thereof; and the radio access dependent information further comprises cost and/or available bandwidth (see Fig. 3 – Fig 4 and pages 46, 47).

**Regarding claim 6**, Chan discloses a system as modified in claim 4, wherein at least one access selection adapter comprises: a QoS controller for generating the status information by interacting with a corresponding application; an access manager

for handling access to its associated radio access network, and for initiating and setting up a radio bearer therein; and a translator for receiving as inputs said radio access dependent information access and map them to said access technology independent information (wireless hints) (see Fig. 2).

**Regarding claim 7**, Chan discloses a system as modified in claim 2, wherein the protocol spanning the backbone network, the access networks, the access adaptors, the access selector, and the applications are IPv4 or IPv6 protocol suite (i.e., IPv6 addresses with global validity, see Address Management in page 45).

**Regarding claim 8**, Chan discloses a system as modified in claim 1, wherein the user terminal comprises a database containing configuration data for the applications (i.e., the T-IWU has to keep track of the availability of access segments, which is stored in a suitable database, see the second column in page 44).

**Regarding claim 9**, Chan discloses a system as modified in claim 1, wherein the access selector is structured to perform link independent QoS related software processes for access procedures (see page 47).

**Regarding claims 10 and 11**, Chan discloses a system as modified in claim 9, wherein said QoS related software processes comprise a layer 2-link status process for radio access independent link status information and acquisition (i.e., data link layer corresponds the link layer of the TCP/IP) and a CARD (Candidate Access Router) (i.e., an edge router (ER)) process for acquisition of candidate access routers (see Fig. 1 and

second column page 42).

**Regarding claim 13**, Chan discloses a system as modified in claim 1, wherein the access selector is connected to the backbone network, and is connected to the access networks (see reject claim 1).

**Regarding claims 14, 15, 16, and 17**, these claims are rejected for the same reason set forth above in system claims 1 - 11 because they have the same limitations.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONG-THUY TRAN whose telephone number is (571)270-3199. The examiner can normally be reached on M-Th, 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LunYi Lao can be reached on (571)272-7671. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MONG-THUY TRAN/  
Examiner, Art Unit 2617

/Jean A Gelin/  
Primary Examiner, Art Unit 2617  
Dec. 24, 09